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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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21186	7590	05/16/2006	EXAMINER	
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.			NALVEN, ANDREW L	
P.O. BOX 2938			ART UNIT	
MINNEAPOLIS, MN 55402			PAPER NUMBER	
			2134	

DATE MAILED: 05/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/620,176

Applicant(s)

AMIN ET AL.

Examiner

Andrew L. Nalven

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 July 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-20 are pending.
2. Amendment submitted 8 August 2005 has been received and entered.

Response to Arguments

3. Applicant's arguments filed 8 August 2005 have been fully considered but they are not persuasive.
4. Applicant has argued on pages 6-7 that the Tumblin reference fails to teach receiving of application data at an upper connection layer of a transport protocol stack, passing the application data from the upper connection layer to a security layer from within the transport protocol stack and unbeknownst to the application. Examiner respectfully disagrees. Tumblin teaches receiving of application data at an upper connection layer of a transport protocol stack (Tumblin, column 9 lines 38-44, Figure 7 Item 210, column 8 lines 19-26), passing the application data from the upper connection layer to a security layer from within the transport protocol stack and unbeknownst to the application (Tumblin, column 8 lines 19-21 and Figure 7 Item 210). Tumblin teaches an upper connection layer of a transport protocol stack receiving application data directly from an application (Tumblin, column 8 lines 10-35) by disclosing the application directly submitting data to the NSIM (viewed as the upper connection layer). The application data is then passed to the security layer (Tumblin, column 8 lines 10-35) as is evidenced by the passing of application data from the NSIM (upper connection layer) to

the SIM (security layer “security integration module”). The passing of information between the NSIM and SIM is unbeknownst to the application (Tumblin, column 8 lines 18-28). This can be seen because the application makes a generic WinSock create connection call and the NSIM then intercepts the call and makes the proper security calls.

5. Applicant specifically argues that the Tumblin reference fails to anticipate claims 1-2, 4, 6-9, 12, 14-18, and 20 because the NSIM is security aware and it appears that Applicant is implying that this imparts security awareness on the application which would directly conflict with the claims as currently presented that require the application to be security unaware. However, the NSIM being security aware in no way allows an interpretation that the application is security aware. Tumblin specifically refers to the application as security non-extensible meaning that the application is not aware of the security procedures going on behind the scenes.

6. Applicant specifically argues that the Tumblin reference fails to anticipate claims 1-2, 4, 6-9, 12, 14-18, and 20 because the claims allegedly require “that the application directly receives and communicates with the security layer” (see Remarks page 7). However, the claims as currently presented provide no such limitations. Claim 1 defines that the upper connection layer receives data directly from the application and the upper connection layer passes data to the security layer. In no way can this be interpreted to require direct communication between the application and the security layer.

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-2, 4, 6-9, 12, 14-18, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Tumblin et al US Patent No. 6,490,679. Tumblin teaches a system for seamless integration of application programs with security key infrastructure.

9. With regards to claims 1 and 7, Tumblin teaches the receiving of application data at an upper connection layer of a transport protocol stack, the application data directly received from the application (Tumblin, column 9 lines 38-44, Figure 7 Item 210, column 8 lines 19-26), passing the application data from the upper connection layer to a security layer from within the transport protocol stack and unbeknownst to the application (Tumblin, column 8 lines 19-21 and Figure 7 Item 210), encrypting the application data within the security layer (Tumblin, column 8 lines 45-53), passing the encrypted application data from the security layer (Tumblin, Figure 7 Item 290) to a lower connection layer of the transport protocol stack (Tumblin, column 9 lines 45-49 and Figure 7), and sending encrypted application data from a lower connection layer out a network connection (Tumblin, column 9 lines 45-49 and Figure 7). The application disclosed by Tumblin is not required to perform security handshakes in order to send

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encrypted application data over the network (Tumblin, column 9 lines 50-53 and column 8 lines 10-11), the connection layer supports at least one network transport protocol and the security layer is not specific to the transport protocol (Tumblin, column 8 lines 19-22).

10. With regards to claims 2 and 16, Tumblin teaches receiving encrypted application data at the lower connection which came in at the network connection (Tumblin, column 9 lines 38-49, Figures 2 and 7), decrypting the application data within the security layer (Tumblin, column 9 lines 39-45), passing the decrypted application data from the upper connection layer to the application (Tumblin, column 8 lines 19-20, column 9 lines 39-49, Figures 2 and 7) without requiring that the application perform a security handshake (Tumblin, column 9 lines 50-53 and column 8 lines 10-11).

11. With regards to claims 8-9 and 17, Tumblin teaches connection layers comprising code for performing a WinSock network transport protocol (Tumblin, column 8 lines 19-22) and a Secure Socket Layer Session (Tumblin, column 7 lines 16-20).

12. With regards to claim 12, Tumblin teaches the security layer and at least one of the connection layers identifying a particular application and its cryptographic properties (Tumblin, column 8 lines 19-27 and 45-53).

13. With regards to claims 4 and 14, Tumblin teaches a means for establishing a secure connection using a specified handshake mode (Tumblin, column 7 lines 16-20 and column 8 lines 19-22).

14. With regards to claim 15, Tumblin teaches a legacy application that performs security handshakes (Tumblin, column 6 lines 15-24) and a security module that supports a secure connection to the legacy application (Tumblin, column 6 lines 22-24).
15. With regards to claim 18, Tumblin teaches the receiving of the encrypted application data at the lower connection layer using a transport model (Tumblin, column 8 lines 10-22).
16. With regards to claim 20, Tumblin teaches a secure network communications protocol stack interface which is callable from at least the lower connection layer (Tumblin, column 9 lines 38-60).

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claims 3 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tumblin et al US Patent No. 6,490,679 in view of SSL-Talk List FAQ Secure Sockets Layer Discussion List FAQ v1.1.1 ("SSL-Talk List FAQ").
19. With regards to claim 3, Tumblin, as described above, fails to teach the lower connection layer establishing a connection with a handshake mode that is at least one of an interactive mode and a blind-root accept mode. The SSL-Talk List FAQ teaches the use of an interactive mode when establishing a connection with a handshake (SSL-

Talk List FAQ, Section 5.3). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize the FAQ's suggested interactive mode with Tumblin's system because it offers the advantage of allowing a user to override a failed attempt to authentication a server (SSL-Talk List FAQ, Section 5.3).

20. With regards to claim 10, Tumblin as modified fails to teach the connection layer performing transport layer security sessions. The SSL-Talk List FAQ teaches the inclusion of Transport Layer Security Protocols within secure communication systems (SSL-Talk List FAQ, Section 6.2.1).

21. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tumblin et al US Patent No. 6,490,679 in view of Samar US Patent No. 6,304,974. Tumblin, as described above, fails to teach the changing of a list of trusted roots for a secure connection. Samar teaches the changing of a list of trusted roots (Samar, column 7 line 53 – column 8 line 7). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Samar's method of updating lists of trusted roots with Tumblin's system because it offers the advantage of allowing a user to avoid a particular certificate authority if the user does not have confidence in their entity authentication (Samar, column 2 lines 4-13).

22. Claims 11 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tumblin et al US Patent No. 6,490,679 in view Novell NetWare Connection Enhanced NetWare 5 "What's Enhanced in NetWare 5."

23. With regards to claims 11 and 19, Tumblin, as described above, fails to teach an application comprising code for providing lightweight directory access protocol services. "What's Enhanced in NetWare 5" teaches the inclusion of applications providing LDAP services using a transport protocol in the form of a Novell transport ("What's Enhanced in NetWare 5", Section "Lightweight Directory Access Protocol LDAP support"). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize the enhancements defined by "What's Enhanced in NetWare 5" because it offers the advantage of allowing users to easily access X.500 based directories such as NDS.

24. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tumblin et al US Patent No. 6,490,679 in view Microsoft Security Advisor SSL Specific WSALocctl Controls ("MS SSL Advisor"). Tumblin, as described above, fails to teach the identifying of a function as a call back function. The MS SSL Advisor teaches the use of a call back function (MS SSL Advisor, Page 1/15, Paragraph 2). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize the MS SSL Advisor's call back function because it offers the advantage of allowing the service provider to access security information from the application as it considers necessary (MS SSL Advisor, Page 1/15, Paragraph 2).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew L. Nalven whose telephone number is 571 272 3839. The examiner can normally be reached on Monday - Thursday 8-6, Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis-Jacques can be reached on 571 272 6962. The fax phone number for the organization where this application or proceeding is assigned is 571 273 8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Andrew Nalven



JACQUES H. LOUIS-JACQUES
PRIMARY EXAMINER